

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Sampath et al.                      Art Unit : Unknown  
Serial No. :    Examiner : Unknown  
Filed : January 27, 2004  
Title : SCALABLE SPACE-FREQUENCY CODING FOR MIMO SYSTEMS

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants submit the references listed on the attached form PTO-1449.  
This statement is being filed with the application. A copy of the listed U.S. document is not provided in accordance with the waiver posted on the U.S. Patent Office website. Accordingly, only copies of non-patent literature are enclosed.

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Respectfully submitted,

Date: January 28, 2004



\_\_\_\_\_  
Scott C. Harris  
Reg. No. 32,030

PTO Customer No. 23624  
700 First Avenue  
Mail Stop 509  
Sunnyvale, CA 94089

/BY  
KENYON S. JENCKES  
REG. NO. 41,873

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Substitute Form PTO-1449 (Modified)  <b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. <b>MP0396</b>	Application No.
		Applicant <b>Sampath et al.</b>	
	Filing Date <b>January 28, 2004</b>	Group Art Unit	

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,345,599	9/6/1994	Paulraj, et al.			
	AB						

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AC							
	AD							

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AE	Foschini, et al., "On Limits of Wireless Communications in a Fading Environment when Using Multiple Antennas", Wireless Personal Communications, Vol. 6, pgs. 311-335, 1998.
	AF	S.M. Alamouti, "A Simple Transit Diversity Technique for Wireless Communications", IEEE Journal on Select Areas in Communications, Vol. 16, No. 8, pgs. 1451-1458, October 1998.
	AG	Wolniansky, et al., "V-BLAST: An Architecture for Realizing Very High Data Rates Over the Rich-Scattering Wireless Channel", ISSSE 98. 1998 URSI International Symposium on Signals, Systems, and Electronics, pgs. 295-300, September-October 1998.
	AH	Tarokh, et al., "Combined Array Processing and Space-Time Coding", IEEE Transactions on Information Theory, Vol. 45, No. 4, pgs. 1121-1128, May 1999.
	AI	Tarokh, et al., "Space-Time Block Codes from Orthogonal Designs", IEEE Transactions on Information Theory, Vol. 45, No. 5, pgs. 1456-1467, July 1999.
	AJ	Sandhu, et al., "Space-Time Block Codes versus Space-Time Trellis Codes", IEEE Communications Letters, Vol. XX, No. Y, pgs. 1-11, November 2000.
	AK	Hassibi, et al., "High-Rate Codes that are Linear in Space and Time", IEEE Transactions on Information Theory, Vol. 48, No. 7, pgs. 1-55, July 2002.
	AL	Heath, et al., "Linear Dispersion Codes for MIMO Systems Based on Frame Theory", IEEE Transactions on Signal Processing, Vol. 50, No. 10, pgs. 2429-2441, October 2002.
	AM	Ma, et al., "Full-Rate Full-Diversity Complex-Field Space-Time Codes for Frequency- or Time-Selective Fading Channels", Conference Record of the Thirty-Sixth Asilomar Conference on Signals, Systems and Computers, Vol. 2, pgs. 1714-1718, November 2002.
	AN	Liu, et al., "Linear Constellation Precoding for OFDM With Maximum Multipath Diversity and Coding Gains", IEEE Transactions on Communications, Vol. 51, No. 3, pgs. 416-427, March 2003.
	AO	Xin, et al., "Space-Time Diversity Systems Based on Linear Constellation Precoding", IEEE Transactions on Wireless Communications, Vol. 2, No. 2, pgs. 294-309, March 2003.
	AP	Jung, et al., "Design of Concatenated Space-Time Block Codes Using Signal Space Diversity and the Alamouti Scheme", IEEE Communications Letters, Vol. 7, No. 7, pgs. 329-331, July 2003.
	AQ	

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	